



For the host animal cells, for example, monkey COS-7 cells, Vero, Chinese hamster CHO cells (CHO, dhfr gene-deficient Chinese hamster cells CHO (CHO (dlfr') cells), mouse L cells, mouse AtT-20, mouse myeloma cells, rat GH3, mouse fibroblast 3T3-L1, human liver cancer cell HepG2 (HepG2 cells), human sarcoma cell MG-63 (MG-63 cells), human FL cells, white fat cells, egg cells, ES cells (Evans, M.J. and Kaufman, K.H. (1981), Nature, 292, 154), and differentiation-induced cells under appropriate differentiation conditions are used.

Animal cells, especially white fat cells, may be used. As a process of DNA transfer to individual animals, egg cells and ES cells (Evans, M.J. and Kaufman, K.H. (1981), Nature, 292, 154) are used.

For the method of transforming these cells, the calcium phosphate method (Graham et al. (1973), Virology, 52, 456), electroporation (Ishizaki et al. (1986), Cell Engineering (Saibo Kogaku), 5, 577), and microinjection are used.

More specifically, for transformation of bacteria of *Escherichia* genus, for example, the methods published in Proc. Natl. Acad. USA, Vol. 69, 2110 (1972) and Gene, Vol. 17, 107 (1982) are used.

Bacteria of *Bacillus* genus can be transformed following, for example, the method published in Molecular & General Genetics, Vol. 168, 111 (1979).

Yeast can be transformed following, for example, the methods published in Methods in Enzymology, Vol. 194, 182-187 (1991) and Proc. Natl. Acad. USA, Vol. 75, 1929 (1978).

Insect cells and insects can be transformed following, for example, the method published in Bio/Technology, 6, 47-55 (1988).

Animal cells can be transformed by, for example,

the methods described in Cell Engineering (Saibo Kogaku), Separate Vol. 8, New Cell Engineering Experimental Protocol, 263-267 (1995) (Shujun-sha) and Virology, Vol. 52, 456 (1973).

5       The transformant described above is cultured in the presence of the specified compound, and by measuring and comparing the gene product in the cultured material, the ability of controlling the promoter activity of the compound can be examined.

10       The transformant is cultured by publicly known methods. For the medium for culturing the transformant using *Escherichia* and *Bacillus* hosts, liquid medium is appropriate, which contains carbon source, nitrogen source, inorganic compounds, and other substances  
15       necessary for the growth of the transformants. The carbon source includes, for example, glucose, dextrin, soluble starch, and sucrose, etc. The nitrogen source includes, for example, inorganic and organic compounds such as ammonium salts, nitrates, cornsteep liquor,  
20       peptone, casein, meat extract, soybean cake, and potato extract, etc. The inorganic compounds include, for example, calcium chloride, sodium dihydrogen phosphate, and magnesium chloride, etc. Yeast extract, vitamins, and growth-stimulating factors may be added. The pH  
25       about 5 - 8 is desirable for the culture medium.

For the culture medium for bacteria of *Escherichia* genus, for example, M9 medium containing glucose and casamino acid (Miller, Journal of Experiments in Molecular Genetics, 431-433, Cold Spring Harbor  
30       Laboratory, New York, 1972) is preferred. When a higher efficiency of the promoter is required, reagent such as 3- $\beta$ -indolylacrylic acid may be added. When the host is bacteria of *Escherichia* genus, the bacteria are generally cultured at about 15 - 43°C for about 3 - 24  
35       hours, and aeration or stirring may be added to the